

Atty. Docket No. 71044-006CIPN2

REMARKS***I. Allowable Subject Matter***

The Examiner has concluded that Claim Nos.15-20 are allowed. The Examiner has also concluded that Claim Nos. 7-10, 13 and 14 are directed to allowable subject matter and that each one of these claims would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims.

II. Objection to the Specification

The Examiner has objected to the specification because it fails to provide proper antecedent basis for "a male rotor ... having a length less than twice the pitch of the helical thread" as recited by Claim Nos. 15 and 20. Applicant has removed the language from Claim No. 15, thereby broadening the scope of the claim to include rotors of any length. However, in support of the language which remains in Claim No. 20, applicant submits that page 8 of the specification provides sufficient antecedent basis for any rotor length that is greater than two pitches, approximately equal to two pitches or less than two pitches.

On page 8 of the specification, the rotors illustrated by Figure 5 is described as being the length of a single pitch and these rotors are contrasted with the length of the rotors illustrated by Figure 1 which is slightly more than two pitches. It is a principle of claim drafting that "precisely the same words" from the specification do not need to be used in the claims when the overall meaning of the terms would be understood by a person of ordinary skill in the art. *Eiselstein v. Frank*, 52 F.3d 1035, 1038, 34 USPQ2d 1467, 1470-1471 (Fed. Cir. 1995). Inasmuch as it is a mathematical certainty that a single pitch of a helical thread is less than twice the pitch of the

Atty. Docket No. 71044-006CIPN2

helical thread, applicant submits that the specification provides sufficient antecedent basis for claiming a rotor of less than twice the pitch and this objection should be withdrawn.

III. Objection to Claim No. 1

Claim No. 1 has been amended to correct a typographical error which had the male rotor intermeshing with itself. Obviously, this does not make sense because the male rotor intermeshes with the female rotor. The claim has been amended to remove the typographical error.

IV. Claim Rejections under 35 U.S.C. § 102(b)

The Examiner has rejected Claim Nos. 1-3, 5, 6 and 11 as being anticipated by Toyoshima et al. (U.S. Patent No. 5,120,202) under 35 U.S.C. §102(b). In support of this ground of rejection, the Examiner has concluded that Toyoshima et al. discloses all of the elements set forth in these claims. Applicant respectfully traverses these rejections because Toyoshima is directed to a pair of rotors that rotate in the same direction (see Figure 2 and Column 3, lines 24-51) whereas each one of these claims is directed to a male rotor and a female rotor that counter-rotate with respect to each other. Therefore, in Toyoshima, the intermeshing portions of the rotors are moving in "opposite directions in the vicinity of the radial gap 8" (Column 3, lines 43-44) between the rotors. In comparison, since the rotors of the present invention are counter-rotating, the helical groove and helical thread move in the same direction as they intermesh.

To establish anticipation of the present invention, Toyoshima et al. must disclose the invention as set forth in the claim: "A claim is anticipated only if each and every element as set

Atty. Docket No. 71044-006CIPN2

forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. §2131 citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). As also set forth in M.P.E.P. §2131, "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Therefore, to anticipate the present invention, Toyoshima must disclose each and every element recited in claims, including the cooperative relationship between the elements in the claims. Applicant respectfully submits that Toyoshima fails to teach the cooperative relationship between the male rotor and the female rotor as recited in Claim No. 1 - i.e., their counter-rotating relationship. Because Toyoshima does not teach the counter-rotation recited in Claim No. 1, Toyoshima fails to anticipate this independent claim and its dependent claims. Accordingly, applicant respectfully traverses these rejections because, Toyoshima fails to disclose, teach or otherwise suggest the claimed invention.

V. Rejections under 35 U.S.C. § 103(a)

The Examiner has rejected Claim Nos. 4 and 12 under 35 U.S.C. §103 as being unpatentable over Toyoshima in view of Boris (U.S. Patent No. 3,557,687) and Rathman (U.S. Patent No. 2,656,972), respectively. For the same reasons that Toyoshima fails to anticipate the present invention, applicant submits that the combination of Toyoshima with Boris fails to render these claims obvious.

Atty. Docket No. 71044-006CIPN2

VI. Prior Art

In accordance with MPEP §2001.06(b), applicant requests that the Examiner confirm that the prior art cited in the referenced parent applications (10/283,421 and 10/013,747) has been reviewed. In particular, these applications also cite to DE 4121, DE 7116, US Patent Nos. 5,044,909 and 4,145,168, and an article authored by Lysholm in 1942.

VII. Conclusion

Applicant respectfully submits that the independent claims are allowable over the prior art of record, including the cited references. All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,



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